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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,632	04/24/2006	Guenther Weiss	10191/4152	8448

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EXAMINER

PIERRE LOUIS, ANDRE

ART UNIT	PAPER NUMBER
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2123

MAIL DATE	DELIVERY MODE
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08/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,632	Applicant(s) WEISS ET AL.	
	Examiner Andre Pierre-Louis	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner:
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/19/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-13 have been cancelled on 12/19/2005.
2. Claims 14-26 are presented for examination.

Claim Objections

3. Claims 15-20, 22-24, and 26 are objected to because of the following informalities: For example, the word "A" at the beginning of each of the claims should be "The". Furthermore, claim 25 contains typographical error, more specifically lines 6 and 7, "*locationaccording*" and "*one the computer program*", the Examiner assumes that the words are "*location according*" and "*when the computer program*". Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

4.1 Claims 14-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims do not produce a useful, concrete, and tangible result. Furthermore, claim 14-20, and 25-26, are merely directed to software per se; regarding claims 25, the claims merely refers to a computer program without a computer readable medium; also claim 26, it is unclear how the computer program can be embodied in a computer program. [See MPEP 2106]

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.1 Claims 14-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the Examiner how the single step claim performs the verification of the control system. Furthermore, it is unclear to the Examiner how the computer program can be embodied in a computer program, as shown in claim 26.

5.2 Claim 14 recites the limitation "the modules" in line 4. There is insufficient antecedent basis for this limitation in the claim.

5.3 Claim 15 recites the limitation "the simulation model" in line 2; "the plurality of modules" in line 3. There is insufficient antecedent basis for these limitations in the claim.

5.4 Claim 16 recites the limitation "the modules" in line 1. There is insufficient antecedent basis for this limitation in the claim.

5.4 Claim 19 recites the limitation "the simulation system" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6.0 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 14-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Brayton et al. (U.S. Patent No. 6,823,280).

6.1 In considering claims 14,21,25, and 26, Brayton et al. discloses a computer implemented method for simulation and verification of a control system under development, comprising: an arrangement for performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein the modules include distinct memory locations for inter-module communication (*fig.3-4, col.4 lines 18-62*).

6.2 Regarding claims 15 and 22, Brayton et al. discloses that the simulation is performed by running a control system simulation model, the simulation model including a number of sub-models being performed on one of the plurality of modules, respectively (*fig.4, col.4 lines 18-62*).

6.3 As per claims 16 and 23, Brayton et al. discloses that at least some of the modules are dynamically reconfigurable for communication via distinct memory locations (*fig.3-4, col.5 lines 14-62, col.6 line 58-col.7 line 10*).

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6.4 With regards to claim 17, Brayton et al. discloses the cross-bar switch for dynamic configuration of the distinct memory locations (*fig.3-4, col.6 line 58-col.7 line 40; also see col.10 lines 24-61*).

6.5 Regarding claim 18, Brayton et al. discloses that the interconnection scheme for coordination of the distinct memory locations (*fig.4, col.4 lines 18-62, col.10 lines 24-61*).

6.6 As per claim 19, Brayton et al. discloses the host-target communication interface for connection of the simulation system with a simulation host, an input interface, and output interface (*col.1 lines 16-67; also see fig.4 col.3 line 1-col.4 line 62*).

6.7 With regards to claims 20 and 24, Brayton et al. discloses that the modules includes at least one output port server for communication interconnection with respective output service of the other modules (*fig.1-2, col.4 lines 18-62*).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7.1 Scharold et al. (U.S. Patent No. 7,162,385) teaches a control system simulation, testing, and operator training.

7.2 Hlandky et al. (U.S. Patent No. 4,599,070) teaches an aircraft simulator and simulated control system thereof.

7.3 Wise et al. (U.S. Patent No. 5,404,304) teaches a vehicle control system for determining verified wheel speed signal.

8. Claims 1-13 are cancelled and claims 14-26 are rejected; This Action is Non-Final. Any inquiry concerning this communication or earlier communications from the examiner should be

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directed to Andre Pierre-Louis whose telephone number is 571-272-8636. The examiner can normally be reached on Mon-Fri, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 25, 2007

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7/30/07